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Research Article

Factors for the Limited Use of Long-Acting Reversible Contraceptives among Female Health Care Professionals of Reproductive Age in Pakistan's Twin Cities

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Abstract

Background: The most successful method of reversible contraception is long-acting reversible contraception (LARC). Most women are pleased with LARC techniques, however spotting and unexpected bleeding are typical causes for discontent and abandoning the treatment altogether. Hormonal birth control implants such as Implanon, Norplant, and Nexplanon, as well as the hormonal intrauterine devices (IUDs) Paragard and Mirena, are also considered LARCs.

Objective: To determine the level of awareness and factors that affect the use of LARCs among female health care professionals

Methodology: From June 1st, 2022, to June 30th, 2022, researchers in Twin Cities, Pakistan surveyed 130 reproductive-age female health care employees at five different healthcare institutions using a cross-sectional methodology. By use of a lottery system, participants were chosen at random. The chosen individuals completed a questionnaire. SPSS v23 was used to input and evaluate the data.

Results: A sample size of 130 (N) was collected in which 30 were doctors, 50 were para-medical staff and 50 were from nursing. Level of awareness was about 80% while believe in myths was about 60% of our selected participants. False believes and intentions towards LARCs is more than the other contraceptive methods.

Conclusion: Current acceptance of LARC among health professionals of reproductive age is 60%. LARC adoption was completely dominated by short-term family planning methods. Factors such as age of respondents, attitude of spouse or partner, discussion with spouse or partner, and use of LARC before the study were statistically significant and associated with LARC adoption.

Keywords: LARCs; Health Care Female Workers; Pakistan; Contraceptives

Introduction

Each year, 74 million women in poor and middle-income nations become unwanted [1]. 25 million unsafe abortions and 47,000 maternal deaths occur each year because of unwanted pregnancies [2,3]. The extended postpartum period, or the first 12 months following birth, is associated with an increased risk of unwanted pregnancy [4,5]. After giving birth, women in poor and middle-income countries (LMICs) are more likely to get pregnant by accident [6]. This is in contrast to the situation in high-income nations.

One reason why there were 2.7 million newborn deaths [7] and 2.6 million stillbirths [8-12] is that fewer women with undesired pregnancies sought prenatal care and assisted delivery. Inconsistent or improper use of contraception [7,12,14-15] is a major contributor to unintended pregnancies and births [12-13]. It is normal for people to start and stop using contraception, for whatever reason, leaving them vulnerable to unintended pregnancies [16]. One reason why contemporary family planning methods are not widely used in developing nations is because of a lack of access [18-20].

Lack of awareness, a paucity of trained medical professionals to execute the implantation and removal procedures, and a lack of available family planning methods all contribute to this low rate of uptake [21]. Researchers showed that negative emotions and health worries accounted for two-thirds of dropouts [22].

If a patient stops taking a medication because of unwanted side effects, it may be time to have a talk [3,23]. Lack of access to contraception, the expense of services, antagonism and religious views, and misconceptions about how to use contraception are among acknowledged factors for discontinuance [3,24]. Discontinuation rates vary by method of birth control, thus understanding why people stop using a particular method may better target treatment. Women are more likely to stop using oral contraceptives and other user-dependent techniques than those using intrauterine devices,

as shown in research [3,25]. (IUDs). More than 220 million women of reproductive age in poor and middle-income countries do not use any type of contraception, according to recent estimates by the United Nations and the World Health Organization [26-29].

It is crucial to examine why users stop using contraception in order to enhance service provision and user acceptability of contraception. The uncertainty surrounding the factors that encourage or discourage LARC usage among reproductive-age women spurred our research. The major purpose of the research was to identify factors that contribute to the discontinuation of long-acting reversible contraceptive usage among women working in healthcare.

Methodology

After receiving clearance from a local institutional review board, researchers in Twin Cities, Pakistan surveyed 130 female health care professionals in a cross-sectional study that ran from May 1 to June 30, 2022. female medical professionals of child-bearing age employed by the designated hospitals or clinics. Women in the medical profession who are of childbearing age will participate in the research. Women who were hired into the healthcare industry during the previous six months of the data collecting period and were also expecting a child were not included. The lottery system will be used to choose the participants at random. Information will be gathered using an organised, self-reported survey. After a brief interview, team members filled out a questionnaire to gather the data. We used SPSS 25 to examine the data. The data will be presented in the form of tables and graphs to provide a descriptive summary. Chi-square analysis was done to look for correlations between the variables, and a significant correlation at the p 0.05 level was discovered.

Results

The total sample size (N) of our study is 130 in which we had 30 (23%) Doctors, 50 (38.5%) Para medical staff and 50 (38.5%) in which 60 (46%) of our selected participants belongs to mid adulthood i.e. 24-35 years of age, was selected after full filling the selection criteria.

Our result shows that the participants having discussion with their partner regarding contraception used long acting reversible contraception i.e. 60 (46%) while 70 (54%) of participants didn't use long acting reversible contraception after having discussion with their partner. Although, 60 (46%) husbands were supportive and 40 (31%) were neutral regarding the contraception while 30 (23%) were against contraception which tends partner to not either use or have intention to use LARC while the partners with

Questions	n (%)
Do you know the duration of LARC	120 (92.3%)
Do you know the site of IUD administration	90 (69.2%)
Do you know the site of implant administration	100 (76.9%)
Do pregnancy occurs immediately after removal of implant	70 (53.8%)
Do pregnancy occurs immediately after removal of IUD	40 (30.8%)
LARCs effectively prevent the occurrence of Pregnancy	110 (84.6%)
LARC can cause permanent infertility	80 (61.5%)
Health workers should explain about the side effect of	120 (92.3%)
IUD restricts from normal activities	30 (23.1%)
Insertion and Removal of LARCs is painful	70 (53.8%)
Implant Causes Irregular bleeding	40 (30.8%)
IUD interferes with sexual intercourse	10 (7.7%)
Insertion and Removal of IUD, make Ashamed	30 (23.1%)
Future intention of having more children	60 (46.2%)
Did you use Contraception Ever	110 (84.6%)
Had Abortion History	40 (30.8%)
Did you have discussion with you partner regarding contraception	130 (100%)
Husband's attitude towards using LARC	60 (46.2%)
Did you ever use Long Acting Reversible Contraception	60 (46.2%)
Did you shift your method of contraception	40 (30.8%)
Did you Heard Myths and Believes about Contraception	110 (84.6%)
Did you Heard Myths and Believes about LARC	100 (76.9%)
Did you get Health Care Worker Counselling	60 (46.2%)
Did you ever get special training for using of contraception	130 (100%)
Your future intention to use LARC	60 (46.2%)

Table 1: Shows the level of awareness and use of contraception among participants.

Questions	n (%)
Parity	
1-2	30 (23.1%)
3-4	40 (30.8%)
5+	40 (30.8%)
Which method of contraception you used	
Oral Pills	20 (15.4%)
Depo Provera	10 (7.7%)
Implant	30 (23.1%)
Copper T	20 (15.4%)

Others	30 (23.1%)
Reason for using LARC	
Child Spacing	50 (38.5%)
Birth Limiting	10 (7.7%)
Which method of LARC you used	
Implant	30 (23.1%)
Copper T	20 (15.4%)
Mirena	10 (7.7%)
If you don't use LARC then what are the reasons	
Side Effects	50 (38.5%)
Subfertility	10 (7.7%)
Others	10 (15.4%)

Table 2: Shows the Parity, methods and reasons of using and avoiding contraception among participants.

supportive husbands have future intention and used LARC i.e. 40 (31%) and 20 (15.4%), respectively but the partners with neutral husband shows that 40 (31%) have used LARC while 20 (15.4%) have intention to use LARC. As the parity increases the use of LARC decreases, while 10 out of 20 participants were using LARC that have no children i.e. 50%, as shown in figure 1.

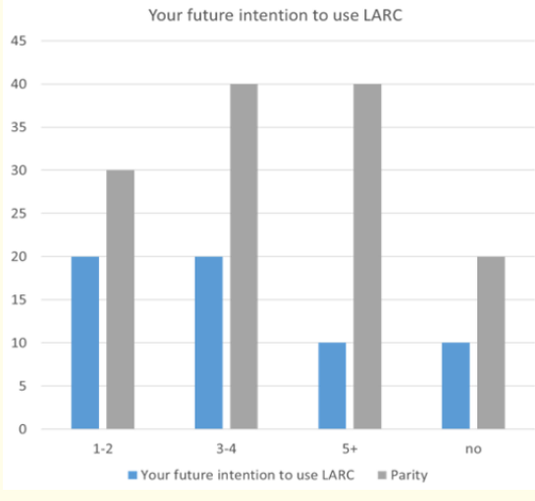

Figure 1: Shows the relation between the parity and future intention to use LARC.

Discussion

We found that the LARC adoption rate was highest among those aged 25–34 (66.67%), compared to those aged 15-24 (33.3%); however, studies conducted in Ethiopia and the United States found the opposite to be true, with the acceptance rate being lower among those aged 25-34 (around 80.6%) than those aged 15-24. (30) Mekelle Town, Jimma Town, Debre Tabor, and Dandi District were the sites of the research, and they found no statistically significant correlation between respondent age and LARC use (30-34). More than 80% of women with an ongoing unwanted pregnancy did not use any kind of contraception in the preceding five years 12, according to a prior research done in Central Asia and six African nations.

Seventy percent or more of the world's population uses some kind of contraception; this number is highest in Europe, Latin America, the Caribbean, and North America; in Africa, it is only 31%; and in Central and West Africa, it is less than 25%. Nine out of 10 women who used contraception in 2011 (in East Africa) did so using a modern method [30]. In Ethiopia, almost everyone is familiar with modern methods of birth control (95.6 percent). Of all women, 29% take use of contraception, but among married women, 42% do so [30]. For Ethiopian women aged 15-49, just 27.8 percent utilise contemporary contraception. Only 4.2% of this population makes use of LARC (0.8% for IUDs and 3.4% for implants) [41]. A research in Lubaga Division, Kampala District, Uganda found that 31.7% of reproductive-aged women there employ the LARC procedure [42,43], which is lower than the rates in the United States (10.2%) and most of Europe (Germany (11%), Romania (10%), France (27%), Bulgaria (18%), and Austria (23.3%)]. Although 31.7% of LARCs were adopted in Uganda, just 16.4% were adopted in Mekkelle Town, Ethiopia (42,44). Jimma Town research again indicated that 16% of the population employed the LARC method. This demonstrates a distinction The Social Acceptability of Long-Acting Reversible Catastrophes [45] This demonstrates variations in LARC adoption throughout African nations, including Ethiopia, yet the root and underlying reasons of this poor acceptance remain a mystery.

Every one of these methods has a success rate of above 99%. Fertility rapidly recovers to normal when LARCs are eradicated. LARC is suitable for the vast majority of women of reproductive age, including those who cannot use estrogen-containing contraception due to health issues such as being a heavy smoker, never having had a child, breastfeeding or recently having a child, experiencing a miscarriage, being overweight, having diabetes, epilepsy, HIV positivity, or inflammatory bowel disease. The implant is implanted beneath the skin of the upper inner arm, just above the elbow, and releases a little quantity of progestin continuously into the bloodstream for three years. A medical professional (doctor, nurse, or EMT) with the appropriate training will insert and remove the implant or IUD while you are sedated with local anaesthetic. The lifespan of the species will determine how often the IUD has to be replaced. The effects of IUDs are reversed instantly when they are removed by a doctor. Hormonal IUDs (Mirena) and copper IUDs ([30,38]) are the two main categories of IUDs. Examples of implants include the progestin etonogestrel-

containing Implanon (one stick), levonorgestrel-containing Jadelle (two sticks), and levonorgestrel-containing Sino-implant (II) (two sticks). LARCs are gaining popularity [39] because of how well they work to prevent unwanted pregnancies.

Our findings, similar to those of two other studies done in Ethiopia, Nigeria, Rwanda, and Uganda, demonstrated a statistically significant relationship between a husband's attitude towards LARC usage and LARC use (12, 30, 35 -38). Multiple factors, such as the attitude of spouses or partners, the number of children women want to have, access, and monthly family income, were found to significantly influence the number of children women wanted to have, the number of children they wanted to have, and the number of women who used long-term contraception in a study conducted in Ethiopia in 2018.

Given the widespread knowledge that contemporary LARC technology and procedures are accessible at reduced costs via public sector organizations [15,16], the relatively low level of adoption of LARC is perplexing. This percentage is much lower than that of other regions of Southeast Asia, notably neighboring Iran, where LARC procedures are utilized by 8% of contraceptive users [17].

Our research indicated that the LARC acceptance rate was 46%, which was lower than the percentage achieved via conversation with spouses. Yet, in Ethiopia, we found the opposite to be true: that the more they talk, the more likely they are to agree with LARC (by a factor of 23.23). (30).

Furthermore, LARCs provide customers a number of benefits in the areas of portability, gratification, continuity, the prevention of unintended pregnancies, and other non-contractual advantages [6-8]. Yet, barely 2% of the current mix of contraceptive treatments in South Asia is LARC usage [4,9]. Barriers to adoption include access, price, lack of marketing, and misunderstanding of the effects of LARCs [10,11]. DHS surveys reveal that 98% of individuals in Pakistan are familiar with at least one contemporary method of contraception, [12] but only 25% of married couples in the country actually use one. Since 2002, the percentage of Pakistanis who use LARCs has climbed by just a little margin, from 2.1% to 3% [12-14].

In our research, we found that LARC usage decreased as parity increased among medical professionals. On the other hand, a research from Uganda found the inverse; that is, the greater the parity, the more likely people were to utilise LARC (12). Another research found that having more than five children similarly increases the likelihood that a family would utilise a LARC.

Despite a rising global rate of contraceptive usage [2], millions of women in low and middle-income countries (LMICs) are still at risk of having unintended pregnancies because of a lack of access to effective methods of birth control. Implants and intrauterine devices (IUDs) are examples of long-acting reversible contraceptives (LARCs) that are very effective. Contrary to the pill, patch, and vaginal ring, LARCs are effective for women of all ages [5].

Myths and misunderstandings concerning LARC's negative effects, as well as the husband's attitude and choices about LARC usage, were shown to be contributing factors in a 2021 qualitative research (29) done in Pakistan. Another Ethiopian research found that 40.2% of women who had previously used a long-acting contemporary technique had stopped using it because of adverse consequences. Ugandan women utilized LARC 31 at a rate of 44.1 percent, according to a cross-sectional research. Prior research on Pakistani women's perspectives on LARC, particularly IUCD, highlighted universal challenges such as apprehension about potential negative consequences, spouse disapproval, and religious resistance [18-24]. LARC usage was much more common among college-educated, middle-class, and upper-class women [25]. Barriers to LARC utilisation, especially among postpartum moms, have been highlighted, including the accessibility and price of LARC procedures [26-28].

Strengths and Limitations

Strengths

- Primary data were collected by Team Members by interview data collection method.
- Structured questionnaires were used to collect data from clients.

Limitations

- As this study was based on a targeted population among health care professionals, it might undermine generalization of the study result to the general population including non-health care professionals, rural community and non-family planning users.
- The study design is cross-sectional; therefore, it may be difficult to establish a temporal relationship.

Conclusion and Recommendations

Conclusion

LARCs are currently accepted by 60% of reproductive age health care specialists. Short-acting family planning approaches completely dominated LARC acceptance. Factors such as respondents' age, husband or spouse's attitude, conversation with a husband or partner, and previous use of LARCs were shown to be statistically significant and linked with LARC acceptance.

Recommendations

- Health centers must ensure the availability of printed materials such as leaflets to help users understand the benefits of using LARC.
- Service providers should provide guidance on LARC during the consultation.
- The health professional should teach both partners, especially the husband.
- Partners should discuss and understand together the benefits of LARC use for their family.

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